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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,615	10/17/2003	Michael Haubs	05587-00358-US	2436
23416	7590	01/16/2007	EXAMINER	
CONNOLLY BOVE LODGE & HUTZ, LLP			LUNDGREN, JEFFREY S	
P O BOX 2207			ART UNIT	PAPER NUMBER
WILMINGTON, DE 19899			1639	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/688,615	HAUBS ET AL.	
	Examiner	Art Unit	
	Jeff Lundgren	1639	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 10 October 2006.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-13 and 17-22 is/are pending in the application.
- 4a) Of the above claim(s) 3-6, 11-13 and 17-22 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1,2 and 7-10 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>see office action</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election of Invention and Status of Claims

In the Reply filed on October 10, 2006, Applicants elected for species A “the combination where the conveying rate of the conveying device continuously rises and falls and wherein the conveying rate of other devices is periodic,” (i.e., claim 2; see page 2 of Applicants’ Reply). Since Applicants have elected this species, all other species elections are moot since the claims corresponding to these species requirements are withdrawn from consideration (i.e., claims 3-6, 21 and 22).

Claims 1-13 and 17-22 are pending. Claims 11-13 and 17-20 are withdrawn as being directed to a non-elected invention (i.e., Groups II-IV). Claims 3-6, 21 and 22 are withdrawn as being directed to non-elected species. Claims 1, 2 and 7-10 are the subject of the Office Action below.

Information Disclosure Statement

The Information Disclosure Statements filed January 16, 2004, and April 30, 2004, fail to fully comply with 37 CFR § 1.98(a)(2), which requires: (i) a legible copy of each cited foreign patent document; and (ii) a copy of an English-language translation of all non-English-language documents, or portion thereof. Accordingly, certain documents cited on the Form-1449 provided without a copy, and/or provided in a language other than English, have been lined through and have not been considered.

Objection to the Declaration under 37 C.F.R. § 1.52(c).

The Declaration filed on March 9, 2004, is defective. A new oath or declaration in compliance with 37 C.F.R. § 1.67(a) identifying this application by application number and filing date is required. See M.P.E.P. §§ 602.01 and 602.02. The oath or declaration is defective because there are non-initialed and/or non-dated alterations that have been made (see address for the second-listed inventor). See 37 C.F.R. § 1.52(c).

Objection to the Specification under 37 C.F.R. § 1.77(b)(8).

The specification is objected under 37 C.F.R. § 1.77(b)(8) for not providing a Brief Description of the Figures. Correction without the addition of new matter is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. § 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 2 and 7-10, are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

Claim 1 is indefinite because the phrase “the individual components” in steps a) and d) of the claim lacks antecedent basis. The phrase “each individual component” in step b) is also indefinite for lack of antecedent basis. Correction is required.

Claim 1 is indefinite for reciting the phrase “for that component” in step b) because it is not clear which component Applicants referencing. Correction is required.

Claim 1 is indefinite for reciting the phrase “at least one conveying device” because it is not clear if this particular device is the “conveying device” in step b), or a different conveying device. Applicants have not properly qualified the “conveying devices,” for example, by reciting “a first conveying device,” or “a second conveying device,” etc. Correction is required.

Claim 2 is generally indefinite for lack of antecedent basis with regards to the two claimed “conveying rates” and the “conveying devices.” Correction is required.

Claim 7 is indefinite because the phrase “the frequency ratio of two periodic variations of the conveying rate of two conveying devices,” lacks antecedent basis.

Claim 7 is indefinite because the phrase “the compositional resolution desired,” lacks antecedent basis.

Claim 7 is indefinite because the phrase “compositional resolution” because one or ordinary skill in the art could not reasonably determine the metes and bounds of this limitation. This phrase neither appears to be art-accepted nor adequately defined in the specification. Correction is required.

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Claim 7 is indefinite for reciting the term "desired" because one of ordinary skill in the art could not reasonably determine the metes and bounds of this limitation. For example, this limitation is a relative term and is open to subjective interpretation. Correction is required.

Claim 9 is indefinite for reciting "and/or" because it is not clear how a single component can be a liquid, conveyable solid *and* a gas, all at the same time. Correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2 and 8-10, are rejected under 35 U.S.C. § 102(b) as being anticipated by Nielsen *et al.*, Int. Pub. No. WO 02/38354, published on May 16, 2002.

Claim 1 is directed to delivering two or more components to a mixing device wherein the rate at which one components is provided at a periodic rate.

As in claim 1, Nielsen teaches a method for production of a polymer product with varying hardness comprising adding together and mixing at least two substances with predetermined relative amounts, filling the substances after mixing into a form, and hardening of the substances to a solid elastic product. According to the invention, the relative amounts of the substances are continuously varied during filling of the form in order to achieve a product with continuously varying hardness within the product (see Figures 1 and 2, and description thereof).

Nielsen states:

"The flowing speed of the different substances to be mixed is calculated by the computer 301. For example, this can be achieved by interpolation between the data as shown in Table 2. From these data, a polynomial equation can be calculated which describes the continues variation of the flow speed for the different substances by regulation of the speed for each of the pump motors 206. Being able to produce elastomer products with continuously varying hardness within the product, several known problems may be solved.

Being able to produce elastomer products with continuously varying hardness within the product, several known problems may be solved."

Nielsen, page 6, lines 23-30.

As in claim 2, one of the rates is varied periodically and one rate continuously rises (see Figure 1). As in claim 8, the total conveying rates are constant in order to produce continuously varying hard films (page 6, lines 23-30). As in claim 9, each one of the components is a liquid, solid or gas. As in claim 10, Nielsen teaches polymer melts and additives (see Table 1 on pages 3 and 4).

Conclusions

No claim is allowable.

If Applicants should amendment the claims, a complete and responsive reply will clearly identify where support can be found in the disclosure for each amendment. Applicants should point to the page and line numbers of the application corresponding to each amendment, and provide any statements that might help to identify support for the claimed invention (e.g., if the amendment is not supported *in ipsis verbis*, clarification on the record may be helpful). Should Applicants present new claims, Applicants should clearly identify where support can be found in the disclosure.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Jeff Lundgren whose telephone number is 571-272-5541. The Examiner can normally be reached from 7:00 AM to 5:30 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, James Schultz, can be reached on 571-272-0763. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JSL



MARK L. SHIBUYA
PRIMARY EXAMINER